

528507

PCT/JP2003/011992



## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|                                                                                                    |                                                                                                                               |                                                                  |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Applicant's or agent's file reference<br>03160(PCT)                                                | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |                                                                  |
| International application No.<br>PCT/JP2003/011992                                                 | International filing date (day/month/year)<br>19 September 2003 (19.09.2003)                                                  | Priority date (day/month/year)<br>20 September 2002 (20.09.2002) |
| International Patent Classification (IPC) or national classification and IPC<br>G11B 7/0045, 7/125 |                                                                                                                               |                                                                  |
| Applicant<br>NEC CORPORATION                                                                       |                                                                                                                               |                                                                  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>                                                                                                                                                                   |  |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input checked="" type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input checked="" type="checkbox"/> Certain observations on the international application</p> |  |

|                                                                    |                                                                 |
|--------------------------------------------------------------------|-----------------------------------------------------------------|
| Date of submission of the demand<br>19 September 2003 (19.09.2003) | Date of completion of this report<br>10 March 2004 (10.03.2004) |
| Name and mailing address of the IPEA/JP                            | Authorized officer                                              |
| Facsimile No.                                                      | Telephone No.                                                   |

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/011992

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/011992

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

See supplemental sheet

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. \_\_\_\_\_

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 03/11992

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV. 3.

Claims 1 and 2, claim 12, and claim 11 limited to a form recited in claim 1 or 2 describe an invention that selects a laser power so as to maximize laser power-dependent variation in asymmetry.

Claims 3 to 10, claims 13 to 21, and claim 11 limited to a form recited in any of claims 3 to 8 describe an invention that selects a laser power based on a specified combined pattern.

These groups of inventions are not recognized as being one invention or a group of inventions so linked as to form a single general inventive concept.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 03/11992

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

|                               |        |             |     |
|-------------------------------|--------|-------------|-----|
| Novelty (N)                   | Claims | 2-11, 13-21 | YES |
|                               | Claims | 1, 12       | NO  |
| Inventive step (IS)           | Claims | 2-10, 13-21 | YES |
|                               | Claims | 1, 11, 12   | NO  |
| Industrial applicability (IA) | Claims | 1-21        | YES |
|                               | Claims |             | NO  |

### 2. Citations and explanations

Document 1: JP 2002-260230 A (Yamaha Corp.), 13 September 2002

Document 1 (paragraphs [0075] to [0081], fig. 31) discloses the selection of a range of recording power so that  $\Delta\beta$ , a derivative of the  $\beta$  value, is maximized; thus, the inventions described in claims 1 and 12 lack novelty and do not involve an inventive step.

Document 1 (paragraphs [0023] and [0032]) discloses the selection of recording power according to disk-type data; thus, the invention described in claim 11 limited to the form recited in claim 1 lacks novelty and does not involve an inventive step.

The inventions described in claims 2 to 10 and 13 to 21 are not disclosed in any of the documents cited in the international search report, nor would they be obvious to a person skilled in the art.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/JP 03/11992

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 1, 8, 12, and 18 are not sufficiently supported by the description. The description does not include sufficient technical support for the selection of a laser power that maximizes asymmetry variation.

Claims 2, 3, and 13 are not sufficiently supported by the description. The description does not include sufficient technical support for the selection of a laser power based on a specified combined pattern that is a sequential combination of a first signal and a second signal.